

**DIPLOMA IN ELECTRICAL ENGINEERING
(DELVI) / ADVANCED LEVEL CERTIFICATE
COURSE IN ELECTRICAL ENGINEERING
(ACELVI)**

Term-End Examination

December, 2015

BIEE-031 : 'C' - PROGRAMMING

Time : 2 hours

Maximum Marks : 70

Note : *Out of seven questions, five questions are to be answered. Question no. 1 is compulsory.*

1. Choose the correct answer. $7 \times 2 = 14$

(a) Which of the following is a valid variable ?

(i) average

(ii) float

(iii) for

(iv) int

(b) Which of the following is a bitwise operator ?

(i) &&

(ii) ||

(iii) <<

(iv) !

- (c) Which of these is **not** an operating system ?
- (i) DOS
 - (ii) LINUX
 - (iii) UNIX
 - (iv) JAVA
- (d) Which one is a ternary operator ?
- (i) Assignment
 - (ii) Relational
 - (iii) Conditional
 - (iv) Bit-wise
- (e) %d is used for
- (i) int
 - (ii) double
 - (iii) char
 - (iv) float
- (f) Array is a collection of
- (i) Same data elements
 - (ii) Heterogeneous data
 - (iii) Both (i) and (ii)
 - (iv) None of the above
- (g) Which of the following **cannot** be a valid identifier ?
- (i) sum
 - (ii) - sum
 - (iii) / sum
 - (iv) sum - 7

2. (a) Use goto statement to print the numbers from 1 to 10. 7
- (b) Write a program to count the number of records in a file. 7
3. (a) Write a 'C' program to find out the transpose of a matrix. 7
- (b) Write a 'C' program to check whether the number is prime or not. 7
4. (a) Write a 'C' program to calculate the addition of all elements of a vector. 7
- (b) What is the role of C-programming in Electrical Engineering ? 7
5. (a) What is primary key ? Explain the role of primary key in database. 7
- (b) Differentiate between break and continue statements with suitable examples. 7
6. (a) What is recursion ? Write a program to calculate the factorial of any number. 7
- (b) Write a program to find the transpose of a matrix of order 3×3 . 7
7. Write short notes on any *four* of the following : $4 \times 3 \frac{1}{2} = 14$
- (a) CAE
- (b) CAM
- (c) CAD
- (d) CAI
- (e) User-defined datatypes